

Research and Development Priorities for Urban and Peri-Urban Agriculture

Pay Drechel and Dagmar Kunze

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Research Theme:
Sustainable Smallholder Land & Water Management Systems

A number of issues related to urban and peri-urban agriculture (UPA) and its resource base will arise in the near future. This paper looks at a variety of aspects related to UPA and waste management. The paper highlights:

- Issues related to environment and public health
- Scientific knowledge gaps in soil fertility management and nutrient recycling
- Issues that are felt to be important topics from the farmers' point of view
- Decision making in policy, planning and economics

Some priorities concern "development," i.e., they focus on areas for projects or technical assistance at the field level. Priorities for "research," on the other hand, look at knowledge gaps that hinder ongoing development activities or future technical cooperation. At the same time, research will build up a basis for decision makers in policy and planning.

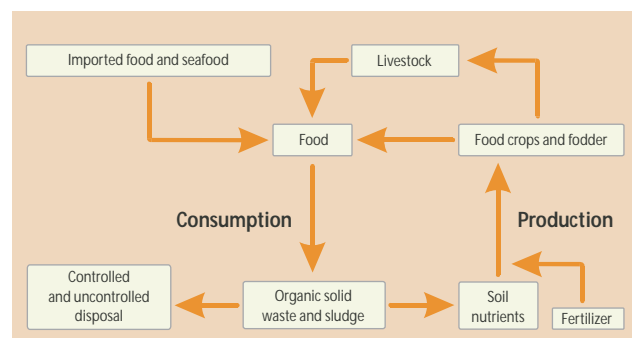
Environment and public health are of obvious concern in relation to (peri-) urban agriculture. Risks may be caused through the use of wastewater, pesticides, recycled waste-stream products (compost from sewage, manure, etc.) and by handling through marketing. Hence, priorities center on four areas of sanitation: infrastructure, water, soil, and food and nutrition.

Soil fertility aspects are of major concern to research with respect to sustainable soil management, maintaining agricultural production and environmental protection against soil contamination. There is a need to understand nutrient flows in existing (peri-)urban farming systems, to quantify the amounts and value of urban waste materials available and assess

their agricultural potential, to develop and test appropriate waste-processing technologies and to improve research uptake in governmental and nongovernmental institutions.

Farmers' points of view on issues in UPA development primarily concern land availability and tenure, credit availability, agrochemicals,

Urban areas as huge "nutrient banks"





transport of organic manures/compost, water availability/accessibility and quality, market entry, and an insufficient number of extension officials trained in UPA.

Policy, planning and economics issues can constrain urban agriculture and organic waste recycling. Some issues for particular attention include increasing public awareness, improving implementation of bylaws, promoting institutional capacity building, improving infrastructure, identifying feasible and appropriate technologies and enhancing investment in UPA and waste management/recycling programs.

It has to be noted that necessary improvements in urban living, regarding agriculture as well as waste management, can only be made if decision makers are willing to take the first steps. Many activities discussed here depend on the outcome of a number of general decisions, which have to be taken at the policy level.

For agriculture, one of the major decisions to be made at policy and planning levels is the appropriate consideration of UPA by the municipal authorities. In most cities in western Africa, this process is still in its development stage, leaving the status of urban and peri-urban agriculturists, who are often squatters, unclear. These farmers are not only denied any official status, but are refused any governmental service as well. However, there are also encouraging examples of support.

Regarding waste management, one of the major decisions to be taken at the level of policy and planning is the allocation of sites for waste deposits and treatment, and the organization and financing of waste collection. Moreover, the control of illegal dumping or “hijacking” of trucks carrying night soil needs attention. The free accessibility of “composted waste” from illegal waste dumps undermines not only sanitation but also any controlled and environmentally safe compost production.